Productive or technical efficiency refers to minimizing the cost of producing a given level and quality of goods or services. Cost containment may come from efficiency in internal operations or technological change. Competition enhances technical efficency both by spurring technological innovation and providing an incentive for firms to reduce costs.

"Economic efficiency" may also be judged in terms of static and dynamic economic efficiency. Static efficiency is similar to allocative efficiency. As to dynamic efficiency, we agree with the applicants that competition will encourage the deployment of new and better technologies over time. We also agree that an increase in the networked properties of information technology could lead to major economic gains for the state as a whole.

GTE notes that granting the applications will result in duplicate, overlapping construction of facilities, which is economically inefficient. While this argument may have some merit, it is also the case that the applicants are introducing fiber optic based networks, while the incumbents' networks may include a mix of newer and older technology. The facilities are therefore not merely duplicative, but, to some extent, represent the replacement of an older technology with a newer one. To the extent that there is duplication, we find that the benefits of competition outweigh the disadvantage.

GTE claims that the utilities' cost of capital will increase because of the increased riskiness of investment associated with a competitive market system. That remains to be seen. If the utilities' revenue requirement increases as a result of competitive local entry, we can address the issue in appropriate rate proceedings. We are not convinced that such an increase is a necessary outcome of the applicants' entry into the local exchange market.

In theory, we agree with GTE that competition should be allowed to develop naturally and without government compulsion. At the same time, the incumbents have nearly 100 percent market share in the local exchange market. Until there is indication that competition will thrive on its own, it is not in the public interest for regulators to withdraw completely.

We also agree with GTE that a sound universal service support program is critical to telecommunications in Oregon. The Commission has adopted a program in Docket UM 731 that addresses GTE's concerns.

Issue IV: Other Considerations

(a) Should the Commission authorize the applicants to provide service within the entire area designated in the applications?

Issue IV(a) was resolved by stipulation.

Issue IV(b): If the application is approved, under what circumstances may the applicants deny service to a potential customer within the competitive zone?

Positions of the Parties

USWC asserts that AECs could effectively deny service to customers the AECs do not want to serve by setting prices to make the services unattractive. To require the AECs to serve all customers who request service in the competitive zones, the Commission would have to regulate the AECs' rates. The Commission should avoid such a course of action.

Ideally, USWC believes that an AEC should hold itself out to provide service to all customers within its authorized service area. But USWC recognizes that, unlike public utilities, competitive providers do not have an obligation to serve ubiquitously within their service territories. USWC also acknowledges that the AECs will need time to build their distribution networks. For the present, USWC recommends that AECs not be required to provide service.

MCImetro argues that the AECs should be permitted to deny service to any customer if the potential customer does not agree to reasonable conditions to ensure payment. The AECs should also be able to deny service if they cannot reach a customer. If the entrant does not have facilities that pass the customer and cannot obtain an economic resale product or nondiscriminatory unbundled network component from the incumbent LEC, there should be no obligation to serve that customer. Likewise, if the entrant has facilities that pass the customer but cannot get nondiscriminatory access to the customer's premises, there should be no obligation to serve. **GTE, ELI**, and **Sprint** take a similar position.

MFS states that it is prepared to serve any customer, including residential customers, within its license area. MFS' goal is to provide universal access to its network, whether by other service providers, subscribers, or competitors.

Staff argues that the Commission should leave it to the applicants to determine whom they will and will not serve. MCImetro did not apply for authority to serve residential customers. ELI and MFS intend initially to offer services targeted to the business customer market. The choice of all three applicants to begin by serving only business customers would deny service to potential residential customers within the competitive zones, but this is a legitimate business decision for AECs to make.

The Commission has authority to impose reasonable requirements on AECs pursuant to ORS 759.015, 759.020, 759.030(1), and 759.050. But the Commission has generally adhered to the policy of allowing market forces to determine prices and

conditions of service offered by competitive telecommunications providers. In the long run, Staff believes that policy will best serve the public and should be continued.

AT&T agrees with Staff. The new providers need time to expand their networks. Once their facilities are in place, they will have every incentive to serve customers requesting service. Like all competitive companies, they will be guided by commercially reasonable practices in refusing or terminating service to customers.

Commission Findings and Decision: Issue IV(b)

We decline to impose denial of service criteria on the AECs at this time. We agree with Staff and AT&T that it is unnecessary to regulate the conditions under which the entrants may deny service to potential customers. The LECs have expressed concern that the AECs will deny service to customers whom they do not wish to serve by pricing their services too high for the relevant customers, by not providing information to potential customers about the availability of their services, or by imposing overly stringent credit requirements. LEC concern is apparently rooted in a perception that it is unfair for the entrants to deny service to some customers while the LECs are under the obligation to serve ubiquitously throughout their territory.

It would be unreasonable to require that new entrants serve all customers, business and residential, within a given geographic area until such time as their networks are in place to do so. Once their networks are developed, the AECs should have no incentive to refuse service to any customer. On the contrary, they will need to expand their customer base in order to spread their fixed costs over as many customers as possible. If denial of service by AECs creates a problem in the future, the Commission has statutory authority to impose conditions on the AECs and would likely impose conditions similar to those under which the LECs operate. Until competition is robust enough to warrant relaxing the service obligations of the incumbent LECs, however, we find the public interest best served by allowing market forces to work.

Issue IV(c): Should the Commission impose requirements on the applicants in addition to those in OAR 860, Chapter 32?

Positions of the Parties

GTE and **USWC** argue that all competitors and incumbents should be subject to equal regulatory treatment within the competitive zones. OAR Chapter 860, Division 32, contains limited requirements for competitive providers. Those rules were enacted when no competitive firms were providing local exchange service. If the Commission grants the current applications, it should declare that all Division 32 rules pertaining to the provision of local exchange service by utilities will also apply to applicants. Further, the Commission should open a rulemaking for the purpose of modifying Division 32 or creating a new chapter to establish a set of rules appropriate for competitive zones, which would apply equally to all firms.

Staff contends that the Commission should not impose additional consumer protection or reporting requirements on the applicants. Consumers who believe they have been poorly treated by an AEC can opt to take service from the incumbent LEC or possibly another competitive provider. Staff argues that the Commission should leave it to market forces to deal with AECs who provide poor service. If customers encounter special problems in the future, the Commission could consider adopting additional consumer protection rules or requirements for AECs. Staff does not know what additional reporting requirements might be useful for regulating AECs a the competitive market.

Staff notes that regulatory parity may be acceptable as a long range goal, but competition is not sufficiently robust throughout the service areas or even the proposed competitive zones to justify relieving the LECs of various requirements now imposed on them. Because most customers do not have effective alternatives to choose from, consumer protection requirements should continue to be imposed on the incumbent LECs. When the LECs present persuasive evidence that there is sufficient competition for local exchange services, then the Commission will consider relaxing the consumer protection requirements.

AT&T, ELI, MCImetro, MFS, OITA, and **Sprint** concur with Staff. They argue that a competitive market will regulate the behavior of entrants. The requirements in OAR 860, Division 32, are sufficient to monitor the progress of local exchange entry. If the Commission finds that existing requirements are inadequate after it gains experience with a competitive local exchange market, it may always impose additional requirements. These parties urge caution in this area, because unnccessary reporting requirements increase cost and may limit competitive entry.

Commission Findings and Decision–Issue IV(c)

Consumer protection measures are critical when captive ratepayers are forced to use monopoly service providers. To an extent, those safeguards become unnecessary once customers have a choice of carriers. Moreover, the AECs will also compete with the LECs on service, and cannot hope to succeed unless they are sensitive to consumer needs. Thus, the presence of alternatives helps to protect consumer interests. Requirements in addition to those in OAR Chapter 860, Division 32 are therefore unnecessary at this time. We will revisit the issue of consumer protection once competitive local exchange services have been more firmly established.

The LEC goal of regulatory parity requires effective competition for local exchange services. Once competition is established, we will consider whether the consumer protection requirements imposed on LECs should be relaxed.

Issue IV(d): Should the applicants be subject to the Oregon Customer Access Fund Plan? If so, what conditions or procedures are necessary to facilitate compliance with the Plan?

Issue IV(d) was resolved by stipulation.

Issue IV(e): What ancillary services should the applicants be required to provide?
(1) How will the applicants supply such services?

OAR 860-35-020 defines "ancillary service" as "a service, such as billing and collection service" . . . "which is performed by a local exchange carrier to directly administer or support provision of the LEC's basic and enhanced services. [Ancillary services] do not include the provision of common administration such as human resources, accounting, purchasing, inventory control, or other similar functions." Ancillary services include, but are not limited to, E-911 service, directory assistance, operator services, operator assisted calls such as credit card and third party billing calls, and directory listings.

Positions of the Parties

Staff and OITA recommend that the Commission not require the applicants to provide any specific ancillary services except access to E-911 service. The Commission should leave it to market forces and the AECs to determine what ancillary services they will provide.

ELI believes that the AECs should provide ancillary services that benefit the health and convenience of customers in general and which customers expect to receive from their local service provider, including E-911 service, telecommunications relay services, operator and directory services. ELI will provide a number of other ancillary services, using a combination of its own resources and the resold services of the incumbent LECs.

MFS intends to provide ancillary services such as directory assistance, operator services, calling card, conference calling, and voice mail, but does not believe that the Commission should require the AECs to provide ancillary services.

MCImetro believes that the AECs should be required to provide access to operator service, directory assistance, and emergency services, as well as unified telephone directories. MCImetro will use a combination of its own resources and resold service of the LECs to provide these services.

AT&T contends that the Commission should rely on competitive market to determine what services the new entrants will provide. Consumers will probably demand such services, but the Commission should not require an AEC to provide them.

Sprint argues that the AECs should be required to provide operator services, directory assistance, and emergency services.

GTE argues that the principle of regulatory parity also applies to ancillary services. In the competitive zones, any requirement to provide ancillary services should be the same for all firms. In a market environment, the government should not set any requirements. On that principle, GTE argues that 911 service should be the only ancillary service that LECs and AECs are required to provide.

USWC maintains that the Commission should only mandate provision of essential services: a local telecommunications network facility, feature, or function that competitors cannot realistically duplicate or obtain from an alternative source, and to which reasonable access is necessary to enable competition. The only requirement the Commission should impose on AECs is terminating access on their networks.

Commission Findings and Decision: Issue IV(e)(1)

We agree with Staff that E-911 service is the only ancillary service that AECs should be required to provide. Public health and safety concerns support that requirement. We expect that the AECs will offer the remaining ancillary services because their customers will demand them. Again, we prefer to let the market dictate what services AECs offer. The record indicates that the applicants will supply ancillary services with their own equipment or through arrangements with the LECs.

GTE argues that if the Commission requires the AECs to provide only E-911 service, it should require no more from the LECs. OAR 860-32-020 allows telecommunications utilities to petition for authority to abandon service and permits the Commission to relax the LEC consumer protection and service requirements on a case by case basis. Until competition has been established, however, we will not consider lifting the ancillary service requirements on the LECs.

Issue IV(e)(2): What ancillary services, features, and functions should the LECs be required to make available to the applicants?

Issue IV(e)(2) was resolved by stipulation. The LECs agree to treat the AECs as they treat independent local exchange carriers (ILECs) for purposes of making ancillary services available. The resolution of this issue is consistent with our decision that AECs should have cocarrier status with other local exchange service providers. Throughout this order, we have mandated treatment for the AECs that is analogous to the treatment the ILECs receive from the LECs.

Issue IV(f): What intercompany compensation arrangements are needed for calls placed within an exchange, and calls placed between exchanges within the competitive zone?

The most controversial issue in this proceeding relates to the method for compensating carriers for costs associated with the termination of local exchange traffic. Because interconnection costs are a major cost component for new carriers, the terms and conditions of these arrangements are critical to the viability of entrants and the emergence of local exchange competition.

In evaluating the various intercompany compensation proposals, the Commission is guided by ORS 759.015, which requires, *inter alia*, a balanced program of regulation and competition. Toward that end, intercompany compensation should be nondiscriminatory, simple to administer, and neutral from a technological standpoint. It should also foster economic efficiency, create incentives for infrastructure development, and ensure that all carriers are fairly compensated.

Summary of Positions

- USWC and GTE recommend reciprocal usage sensitive compensation based on current switched access charges.

- MFS, ELI, MCImetro, OCTA, and AT&T recommend bill and keep arrangements as the appropriate method of compensating local service carriers for the exchange of traffic. Bill and keep is also referred to by the parties as mutual traffic exchange or payment in kind compensation.

- TCG recommends that interconnection compensation for local traffic be based on bill and keep for end office terminations and flat rate port charges for terminations made at a tandem switch.

- Staff and OITA propose nonreciprocal (one way) usage sensitive compensation based on existing switched access rates.

Reciprocal Usage Sensitive Compensation

USWC and GTE propose reciprocal compensation arrangements based on the access charge rate structure in effect for toll traffic. USWC recommends that AECs pay a switching charge and an interconnection charge[6] for local and toll traffic terminating at a USWC end office switch or delivered to a USWC tandem for delivery to a USWC end

[6] The proposed interconnection charge is a residually priced rate element that is designed to recover the difference in revenues associated with the implementation of the Local Transport Restructure (LTR) proposal that USWC has filed with the Commisison. See USWC Advice No. 1625.

office switch. These charges would be assessed for each minute of use and are reciprocal; that is, USWC will pay an AEC a switching and interconnection charge for each local and toll minute of use originated by USWC customers and delivered to an AEC switch.

USWC's proposal also contemplates that AECs will pay a carrier common line charge (CCLC) for all intraLATA and interLATA toll traffic terminated on USWC end office or tandem switches. The CCLC is part of USWC's current switched access rate structure and is assessed on a minute of use basis. Like the local switching and interconnection charges, the CCLC would be reciprocal. The CCLC would not apply to local traffic.

Finally, USWC proposes that the Commission approve a nonreciprocal Interim Universal Service Charge (I-USC) of 0.85 cents per minute for all local traffic delivered by an AEC and terminated on a USWC end office switch. The proposed I-USC is discussed more fully beginning on page 38 of this order.

USWC's proposed interconnection rates are as follows:

Local and EAS Calls	**Rate (Cents per Terminating Minute)**
Local Switching	1.0881
Interconnection	0.0582
I-USC	0.8500
Total	1.9963

Toll Calls	**Rate (Cents per Terminating Minute)**
Local Switching	1.0881
Interconnection	0.0582
Carrier Common Line Charge	2.0400
OR Carrier Access Fund Charge	0.4810
Total	3.6673

GTE also recommends reciprocal interconnection compensation based on the rates included in its switched access tariff. GTE does not recommend that the CCLC or an I-USC apply to the termination of local or "EAS-like"[7] traffic. The interconnection rate paid by an AEC for terminating local exchange traffic on a GTE switch would be 2.05 cents per minute.

According to GTE witness Dr. Edward Beauvais, the interconnection compensation structure should not distinguish between calls that are intraexchange or

[7] According to Dr. Beauvais, "EAS-like" calls are those between AEC and LEC customers in the Portland area that would otherwise be EAS calls if carried by LECs.

interexchange within a competitive zone or interexchange outside of a competitive zone. However, such an approach requires eliminating the CCLC and rebalancing current rates. Dr. Beauvais recommends that the Commission consider repricing issues in docket UM 351. If switched local service competition is authorized before such repricing occurs, all interexchange interconnection traffic should be assessed the full switched access tariff rate, including the CCLC. Intraexchange traffic would not be subject to the CCLC under those circumstances.

Dr. Beauvais emphasizes–and most other parties concur–that the pricing structure in a competitive telecommunications environment must ultimately move away from arbitrary classifications such as toll, access usage, local usage, and EAS. These classifications would be replaced by a single integrated rate structure applicable to all switched traffic. As USWC points out:

> [L]ocal interconnection is no different technically and conceptually from any other kind of interconnection. Compensation for the use of one carrier's network by another should be the same regardless of how the originating carrier rates the traffic to its customers. In the competitive world, there will be little distinction between local and toll at the state level.

Dr. Beauvais observes that an integrated price structure for interconnection avoids the enforcement and definitional problems inherent in current differential pricing structures, conveys proper economic signals to customers, and is simpler and more equitable to administer. In addition, it will provide the pricing flexibility necessary for telecommunications providers to succeed in an increasingly competitive environment.

Reciprocal Usage Sensitive Compensation–Opposing Arguments

ELI, MFS, MCImetro, AT&T, McCaw, OCTA, Sprint, and **TCG** criticize the proposal to use switched access charges as the compensation structure for interconnection. These parties argue that the proposed rate structure (a) imposes a price squeeze on entrants; (b) precludes opportunities for local exchange prices to decline; (c) creates barriers to competition because of the lack of reciprocity; (d) requires traffic measurement capabilities that are unavailable and costly to implement; (e) is unrelated to underlying costs; (f) inhibits competition by skewing traffic patterns; and (g) forces entrants to imitate the network architecture of the LECs. These arguments are addressed below.

(a) Price Squeeze. According to Dr. Cornell, a "price squeeze" is a relationship between prices that can arise whenever a monopoly supplier of an input to other firms also competes to sell a retail service which incorporates that bottleneck input (or essential function). If the monopoly supplier sets the price of an essential function at a level such that the retail end user price does not recover both the price for the essential function and the remaining costs to produce the service, a price squeeze exists. Under a

price squeeze, competitors who must purchase the essential function from the monopoly supplier face a barrier to entry because they cannot cover their costs at the price charged by the monopolist for the retail service.

ORS 759.050(5)(b) is designed to prevent price squeezes by establishing an imputation price floor for services sold by telecommunications utilities within competitive zones. It requires that the price for a service offered by a telecommunications utility may not be less than the TSLRIC of nonessential functions plus the price of the essential functions necessary to provide the service.[8]

MCImetro and **TCG** presented evidence to demonstrate that the interconnection rates proposed by USWC and GTE will result in a price squeeze. Dr. Cornell and TCG witness Dr. Paul Teske compared USWC's proposed interconnection rate with measured usage rates available to USWC's retail business customers under various calling packages. Both analyses disclose that a USWC business customer subscribing to measured service pays less to *originate and terminate* a local call than an AEC would pay to USWC just to terminate a local call.

Dr. Teske also compared USWC's and GTE's proposed interconnection rates with the retail rates paid by customers for a number of other services. His analysis indicates that:

- USWC medium sized business customers now pay an effective calling rate that is .6 cents per minute (cpm) less than USWC's proposed interconnection rate at higher traffic volumes. Even if an AEC were to confine its market to customers with 900 minutes or fewer per month–less than one half the average usage for USWC PBX and Centrex users in Oregon–the AEC would still pay .14 cpm more to terminate calls than the effective calling rate now paid by USWC customers.

- USWC large volume business customers taking Digital Switched Service (DSS) service pay an effective calling rate of .529 cpm, compared with USWC's proposed interconnection rate of 1.9963 cpm.

- USWC residential customers taking measured service pay effective retail prices from 1.27 cpm to 1.33 cpm compared with USWC's proposed interconnection rate of 1.9963 cpm. In the case of flat rate residential service, the interconnection

[8] In Order No. 95-313, the Commission determined that the imputation test in ORS 759.050(5)(b) should apply to all services provided by telecommunications utilities, regardless of whether they are local or interexchange services, and regardless of whether the services are provided within or outside of a competitive zone.

rate is lower than the effective calling rate only for customers making fewer than two calls per day.[9]

- GTE flat rate business customers pay an effective calling rate less than GTE's proposed interconnection rate of 2.05 cpm once usage exceeds 644 local calling minutes per month.

- As in the case of USWC, GTE residential customers pay an effective calling rate less than GTE's proposed interconnection rate only if they make fewer than two calls per month.

Based on his analysis, Dr. Teske contends that the interconnection rates proposed by USWC and GTE create a classic price squeeze, which effectively precludes AECs from competing for local business and residential customers. In every instance, the rate that AECs would pay to terminate calls is greater than the effective calling rate that USWC and GTE customers now pay to receive retail service. Thus, AECs would experience negative operating margins even before incurring any of the costs associated with originating, switching, or transporting the call. These additional costs further exacerbate the substantial losses AECs would encounter. Dr. Teske concludes that local competition is not viable under such circumstances.

Several parties emphasize that the usage based interconnection rates proposed by USWC and GTE will create an underlying cost structure that is incompatible with the flat rate environment for retail local exchange service in Oregon.[10] If usage sensitive charges are assessed for every minute of use, it is uneconomic for an AEC to serve customers beyond a given usage threshold. As demonstrated by Dr. Teske's analysis, the USWC and GTE proposals effectively create a price squeeze at higher usage levels, relegating AECs to serving low volume customers that are least likely to be interested in obtaining service from a competitive provider.

In its posthearing brief, GTE alleges that Dr. Teske's interconnection/retail rate comparison is misleading and inaccurate because it (a) hinges on assumed usage levels not based on actual traffic studies; (b) reflects only traffic flowing in one direction, and does not account for offsetting revenue; and (c) fails to take into account the mandatory EAS additive. GTE claims that, if the correct figures had been used, Dr. Teske's comparisons would have yielded positive margins at all assumed levels of usage.[11] It further emphasizes that switched access rates are subject to change in the pending

[9] For purposes of his analysis, Dr. Teske assumed that the average length of a residential call is 5 minutes.

[10] ORS 759.235(1) prohibits mandatory measured service in Oregon. Approximately 95 percent of USWC's subscribers choose flat rated service.

[11] GTE also notes that TCG's rate comparison is based on the proposed 2.05 cpm interconnection rate which incorporates ten miles of interoffice transport. If the amount of interoffice mileage were reduced or eliminated, the interconnection rate would be less.

UM 351 investigation, and that GTE has proposed reductions in its switched access rates that may extend to both local and toll traffic.

TCG disputes GTE's claims regarding the validity of Dr. Teske's price squeeze analysis. It maintains that a price squeeze still exists for a large segment of the relevant market even after the EAS additive is included in the comparison. TCG's calculations show that GTE business customers making more than 1182 minutes of calls per month will have an effective retail rate less than GTE's proposed 2.05 cpm interconnection charge. Likewise, GTE residential customers making more than 662 minutes of calls per month–4 to 5 calls per day–will have effective retail rates less than 2 cpm, resulting in negative margins for competitors. TCG maintains that anticipated reductions in rates generated by competition will only exacerbate the price squeeze by reducing the threshold level beyond which AECs cannot effectively compete.

USWC witness Dan Purkey performed a series of imputation analyses to demonstrate that USWC's proposed interconnection rate will not result in a price squeeze. Mr. Purkey conducted service specific imputation studies for flat rate simple business service, flat rate complex business service, business measured service, PBX trunk service, Centrex line service, DSS service, and Public Access Line Measured Service. A separate analysis was made for each service using the Average Direct and Shared Residual Cost (ADSRC) methodology and the Average Service Incremental Cost (ASIC) methodology.[12] In addition, an imputation analysis inclusive of all USWC business services was performed using the ADSRC approach. In every case, the imputed price floors derived were significantly less than USWC's current tariff rates. According to Mr. Purkey, these results demonstrate that USWC's interconnection proposal will allow AECs to compete with USWC for local exchange business services.

ELI, TCG, and others maintain that USWC's imputation studies improperly manipulate cost and price data and ignore applicable imputation requirements in order to demonstrate that switched access compensation will not create a price squeeze. ELI states that USWC: (a) assumes incorrectly that certain inputs are nonessential instead of essential (and therefore improperly imputes USWC's cost instead of the tariff rate); (b) fails to include certain essential functions and nonessential service specific costs; and (c) relies on hypothetical usage and price data. Furthermore, USWC's analyses do not reflect the actual telecommunications marketplace and disguise the fact that the proposed switched access compensation structures will render local competition uneconomic by barring entrants from creating profitable services.

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[12] For purposes of imputation, ADSRC is USWC's preferred method of calculating cost. ADSRC incorporates certain shared and residual costs and yields somewhat higher price floors for the services studied. ASIC is another method of computing cost that does not include shared and residual costs.

To illustrate the alleged shortcomings in USWC's imputation analysis, ELI witness William Montgomery prepared a revised imputation study. Mr. Montgomery used the same general method as Mr. Purkey, but incorporated the following assumptions: (a) intraoffice traffic is included for imputation purposes;[13] (b) terminating transport is treated as an essential function and imputed at USWC's tariff rate; (c) number portability and directory listings are considered essential functions and imputed at $4.00 and $0.75 per line per month, respectively; (d) USWC is assumed to use its pricing flexibility to offer "Custom Choice" discounts of 30 percent to business customers;[14] and (e) USWC's proposed I-USC is disallowed. Mr. Montgomery's imputation analysis included flat rate business service, Centrex/PBX/DSS usage, and all business services combined. His adjustments generally yield higher price floors, and therefore a smaller margin between the amount an AEC must pay for interconnection and the amount charged by USWC for the retail end user service. In several instances, the AEC margin is negative; that is, the imputation price floor exceeds the USWC tariff rate for the retail service. Dr. Montgomery contends that negative margins affirm the existence of a price squeeze, since AECs lose money on every minute of use.

(b) Impact on Local Rates. **AT&T, ELI, OCTA** and **MCImetro** contend that USWC's proposed interconnection rates will require it to raise local rates, resulting in an upward pricing spiral. Dr. Cornell explains how pricing interconnection above cost prevents competition from lowering retail prices:

> Since interconnection is a service that cannot be self-supplied, the price paid, whether in cash or in kind, is a permanent part of the cost structure of each carrier. Thus if either carrier has to pay more than cost to the other carrier, the amount above cost remains permanently embedded in the cost of local exchange service. This is because what is a price to the carrier charging that amount is a cost to the carrier paying it.
>
> Not only does USWC want to embed some amount above cost in local exchange rates permanently, but it also wants to impose a price squeeze. This means that USWC is trying not only to recover all of the "contribution" from local calling that it would have gotten had it provided the end to end call, but it is trying to recover some of the "contribution" that it would have gotten if it had supplied the access connection as well. Any policy that allows USWC to continue to collect "contribution" even when it does not provide the service from which the "contribution" is derived is a policy that directly hinders the achievement of

[13] USWC and ELI disagree regarding the treatment of intraoffice traffic; *i.e.*, whether it is essential and should be imputed at tariff rates, or non-essential and should be imputed at cost. Mr. Montgomery factors both assumptions into his analysis. Including intraoffice traffic at tariff rates raises the total imputation price floor.

[14] USWC's proposal to offer Custom Choice in Oregon has been suspended by the Commission for further investigation.

greater efficiency in telecommunications. USWC loses a significant incentive to compete for the customer, given that it can retain the "contribution" even if it does not incur the costs to provide the service. If USWC is allowed to retain the "contribution" without performing the service, that portion of the total telecommunications bill can never fall due to competitive pressures.

Because of these circumstances, Dr. Cornell argues that USWC's interconnection proposal will not lead to competitive entry. If entry does occur, it will not be sustainable. Absent competitive pressure, Dr. Cornell observes that costs will not decline.

ELI further contends that there is no economic rationale for adopting switched access charges as the compensation structure for local exchange service. According to Mr. Montgomery, the primary rationale for using switched access charges is that LECs need contribution to compensate for universal service and carrier of last resort (COLR) obligations. In an emerging competitive environment, contributions to fund universal service should be collected in a competitively neutral manner, not through inefficient carrier access charges that limit or foreclose competition.

(c) Lack of Reciprocity. MCImetro maintains that USWC's compensation proposal is not reciprocal because AECs will not be able to charge as much as USWC for interconnection.[15] According to Dr. Cornell, nonreciprocal compensation creates a barrier to entry because it requires entrants to absorb higher costs than incumbents. In order for AECs to attract customers, they must price below the rates of the incumbent LEC or offer a better service at the same price. If an AEC is forced to pay a higher interconnection price, it must be more efficient than the incumbent even to match the incumbent's price, let alone price below the incumbent. Therefore, a lack of reciprocity is similar to a price squeeze because it keeps equally efficient carriers out of the market.

Dr. Cornell also emphasizes that requiring a more efficient carrier to charge less for interconnection effectively forces that carrier to transfer its efficiencies to its competitors. In order for the market to send correct information to consumers about which firm is more efficient, the more efficient firm must be permitted to pass on the benefits of those efficiencies to its own customers, not the customers of its competitors.

(d) Measurement Related Costs. USWC witness Owens testified that the technological means for measuring terminating local exchange traffic was not available to that company at the time of hearing. USWC anticipated that it would develop a method to generate the necessary call records by the end of 1995. It argues that the

[15] According to Dr. Cornell, the I-USC is not the only difference between what LECs and AECs would pay for interconnection under USWC's proposal. Citing the testimony of USWC witness Dr. Harris, Dr. Cornell states that AECs would be forced to pay higher rates for interconnection elements to reflect "underlying cost differentials [between LEC and AEC networks] and the value of the LEC's ubiquitous networks."

additional investment in measurement capability is necessary to enable carriers to manage their networks in a competitive environment. Networks already have the capability to measure intercompany toll rated traffic, and the cost of adding local measurement is expected to be modest and incremental.[16] USWC points out that existing LECs are already pursuing measurement arrangements. Also, much work has been done to accommodate GTE's entry as a primary toll carrier and to measure the integrated toll and local traffic exchanged with wireless carriers.

Until its measurement system is in place, USWC proposes to work with AECs to determine the local traffic exchanged between networks. Mr. Owens states that originating carriers can supply measurements of local traffic delivered to terminating carriers so that the latter can bill the traffic terminated on their systems. USWC is willing to rely on AEC measurements until a more precise measuring system is in place.

GTE, on the other hand, states that its existing systems can measure local traffic at relatively low cost. GTE can also carry mixed local and toll traffic on two way trunks, provided that the rate for terminating local traffic is the same as the rate for terminating toll. If the terminating rates for local and toll differ, it will be necessary to use separate trunk groups for the two types of traffic. The current industry practice for handling toll and EAS traffic is to use separate trunk groups.

Staff contends that measurement is necessary in a multiprovider environment. Because AECs will interconnect different types of traffic–including intrastate toll, interstate toll, local, and EAS–it is important to record the type of call and jurisdiction so that the appropriate intercompany compensation and end user billings can be made. Staff opposes allowing originating carriers to estimate the "percentage of local use" (PLU) in lieu of actual measurement because of the potential for carriers to misreport traffic.

Opponents of usage sensitive interconnection pricing contend that the costs associated with developing a system to measure intercarrier local traffic will compromise economic efficiency and unnecessarily increase the total cost floor for local exchange services. According to **MCImetro** and **TCG**, cost studies in the state of Washington disclose that adding measurement and billing costs more than doubles the cost of end office switching. Furthermore, USWC estimates that the cost of implementing its new measurement system in Washington will be more than three times the amount now spent to measure switched access minutes of use. Dr. Cornell emphasizes that it is inefficient for firms to develop measurement and billing arrangements that significantly increase the cost of doing business, especially since traffic between networks will tend to be in balance over time. TCG adds that, if traffic is roughly in balance and both carriers' interconnection rates are the same, the expense of

[16] According to USWC witness Owens, the cost of measuring equipment in USWC's proposal is 4.5 cents per dollar of cost.

measuring is wasted because both carriers are simply billing each other the same amount. Even if traffic is not in balance, the degree of imbalance must justify the costs of measuring and billing.

ELI, OCTA and **MCImetro** also observe that measured compensation will force new entrants to incur additional costs to audit and correct errors in measurement and billings. ELI witness Walter Cook and Dr. Cornell testified that the carrier access billings currently received by interexchange carriers contain many errors and must be amended on a regular basis. Audit costs are a significant expense for interexchange carriers and can be expected to increase the cost of providing local exchange service for AECs. Furthermore, AECs familiar with auditing procedures for switched access will not be able to rely on that expertise because the proposed measurement system for local exchange traffic differs from the system for switched access terminations.

Applicants further contend that measurement related costs will impose a greater relative burden on entrants than on incumbent LECs. In order to provide service, entrants either have to incur the expense of installing measurement equipment in their networks or absorb the cost of terminating intercarrier traffic. In addition, AECs will have smaller volumes of traffic over which to spread measurement, billing, and auditing costs for the foreseeable future. In contrast, the amount of local traffic delivered from LEC to AEC facilities will represent a much smaller percentage of the incumbent's total traffic.

(e) Cost Causation. ELI and **TCG** assert that usage sensitive compensation is inappropriate because the costs of facilities used to provide interconnection are largely a function of capacity. These arguments are addressed below.

(f) Traffic Patterns. TCG and **MCImetro** argue that the measured compensation proposals offered by USWC and GTE will distort local exchange competition by encouraging competitors to serve customers with higher volumes of incoming calls in order to equalize interconnection revenues. In a competitive market, new entrants may be expected to serve as many customers as possible, regardless of usage patterns, in order to maximize overall revenues. AECs are likely to evaluate potential customers not only on local exchange use, but on overall telecommunications usage, including toll and vertical services. Customers with high traffic volumes are most likely to be interested in exploring various competitive offerings in order to minimize their total telecommunications costs. MCImetro and TCG contend that measured compensation creates an incentive to avoid interconnection charges and encourages AECs to serve low volume customers and customers that rely heavily on inbound traffic. The problem is exacerbated by the fact that AECs would pay higher interconnection rates than incumbent LECs under the proposals forwarded by USWC and GTE.

(g) Network Architecture. Several parties argue that the switched access compensation structure proposed by USWC and GTE will skew the technology and

architecture choices of entrants, thereby reducing or eliminating the benefits derived from competitive entry. At the outset, entrants can be expected to terminate a much higher percentage of their traffic onto the networks of the incumbent LECs. A switched access rate structure will force entrants to mirror as many of those rate elements as possible and will affect AEC decisions about the architecture to employ. According to Dr. Cornell:

> Switched access charges are composed of a series of rate elements charged for the use of different piece parts of the incumbent's network to terminate a call. Except for the rate elements designed to pay "contribution," if a piece part is not used, then the rate element is not charged. The proposals to use switched access charges for compensation mostly include the same requirement. Thus, the entrant would only be allowed to charge for the same *categories* of costs that the incumbent claims are the costs of providing service.
>
> Suppose an entrant placed only a single switch, using much more "loop" plant than the incumbent. The total cost to it to terminate a local call for the incumbent may or may not be less than the incumbent's costs, but those costs may be in different categories from those used by the incumbent. If the only costs the entrant can recover in its local interconnection tariff are switching and transport costs, however, it will be handicapped relative to the incumbent, and may be prevented from recovering all of its costs regardless of whether they are less than or equal to the incumbent's costs. Because of the inability to recover its costs using its preferred architecture it will face an incentive to try to mirror the architecture of the incumbent, even if it were not the most efficient architecture.

Interim Universal Service Charge

As noted previously, USWC proposes that the Commission approve a nonreciprocal Interim Universal Service Charge (I-USC) of 0.85 cents per minute for all local traffic delivered by an AEC and terminated on a USWC end office switch. USWC witness Jeffrey Owens explains the charge as follows:

> The proposed interim universal service charge is a result of the substantial difference between USWC's residential and business exchange rates. USWC has been able to maintain this differential as a result of its historic role as a single provider of these services in its exchanges, wherein each business customer has provided support to roughly 2.43 residential customers. The advent of competition in the local exchange will ultimately require USWC to equalize the rates for residence and business exchange services–as competition inevitably will drive the prices of these services closer to cost. Initially, most AECs are likely to serve business exchange customers almost exclusively–although some AECs, who have access to the distribution networks of cable companies, are likely to serve a comparable mix of business and residential customers as USWC. If

> USWC is to maintain the differential between its business and residential rates during a transitional period, it is essential that the Commission impose an interim universal service charge on those AECs who choose to avoid the burdens associated with serving the residential market.

USWC contends that the I-USC is not a "keep whole" charge designed to protect it from competitive loss, but is required to maintain consumer equity and competitive neutrality. Mr. Owens emphasizes that the I-USC will only recover a portion of the support flow lost from business customers who will be served by AECs.[17] It will not recover contribution provided by toll, access, and vertical services that are lost when a business exchange customer takes service from an AEC.

USWC proposes that the I-USC be discontinued if an AEC (a) has a sustained ratio of residential to business customers that is equal to or greater than USWC's comparable ratio; (b) provides a telecommunications service which has a demographic and geographic penetration similar to the relevant USWC exchange;[18] (c) serves its residential and business customers using its own facilities; and (d) provides Federal Link-Up and Oregon Telephone Assistance Plan service to its residential customers.

USWC regards the I-USC as a temporary mechanism that cannot be sustained in a competitive environment. It states:

> The monopoly era approach of allocating large amounts of revenue requirement to interconnection rates to keep all residential rates below cost is not viable going forward. There must be a transition downward in interconnection rates, as other rates are rebalanced commensurate with specific, identified universal service requirements. The current pure contribution rate elements of access should be replaced with targeted, competitively neutral funds to meet the affordability needs of low density and low income segments of the market. The industry and the Commission must use interconnection charges sparingly as needed to preserve universal service.

USWC envisions that the I-USC will be reduced over time as the company is able to rebalance its residential rates to levels that recover direct cost plus an appropriate

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[17] Although the cost to provide business and residential service is confidential information, USWC states that Portland area business access lines are priced substantially above cost, while residential lines are priced below cost. The price of a residential line is less than half the price of a comparable business line, even though residential lines are more expensive to provide because of the higher cost of extending loops to residential customers. USWC states that the I-USC should equal the lost contribution per business line divided by the average terminating minutes per line per month. That amount is substantially greater than the 0.85 cents per minute charge USWC has proposed.

[18] Thus, an AEC supplying residential service only to high-rise apartment buildings or other multi-tenant residential units would continue to pay the I-USC.

level of shared and common overhead costs. It urges the Commission to rebalance rates, reduce the subsidies inherent in residential exchange rates and reapportion contribution levels among the company's services.

USWC acknowledges that the Commission is presently reviewing universal service issues in docket UM 731 and will likely entertain rate rebalancing proposals in docket UM 351. Nevertheless, it recommends that the I-USC be approved without delay. USWC contends that its competitors will quickly gain market share in the Portland metropolitan area where USWC business revenues are concentrated. If the I-USC is not implemented, USWC states that it will be effectively deprived of the opportunity to earn a fair rate of return, because competitors will "strip off large portions of [business] revenues," leaving USWC to serve residential and rural customers at unprofitable rates.

Interim Universal Service Charge--Opposing Arguments

Applicants and several intervenor parties recommend that the Commission reject the proposed interim universal service charge proposed by USWC. Opponents of the I-USC contend that the charge is not cost based and is unnecessary to compensate LECs for universal service obligations. These parties assert that USWC has not quantified the level of support necessary to protect universal service or demonstrated that the funds generated by the I-USC would be used for that purpose. They further maintain that, in a competitive environment, all support for universal service should be made explicit and collected in a manner that is competitively neutral.

MFS argues that there is no support in the record for USWC's claim that an implicit cross subsidy of residential service by business service exists, and consequently, no evidentiary foundation to justify adopting the I-USC. MFS notes that the TSLRIC cost data presented by Staff discloses that USWC provides both business and residential service above cost. In contrast, the ADSRC cost methodology used by USWC to demonstrate that residential rates are below cost includes additional common and overhead costs and differs from the cost methodology approved by the Commission in docket UM 351. Given the shortcomings in USWC's cost study, and absent evidence that Staff's TSLRIC calculations are incorrect, MFS asserts that there is no credible evidence to support the I-USC.

Sprint maintains that USWC's method of calculating the I-USC is "inherently suspect and faulty." Sprint claims that the I-USC is necessarily inflated because it presupposes that all AEC customers are former customers of USWC; *i.e.*, that USWC will lose a business exchange line for every line obtained by a competitor. According to Sprint witness Dr. Richard Purkey:

> this presumption of a static market (or "zero sum game") clearly ignores new growth, and as well ignores the fact that US West will undoubtedly collect an IUSC from AEC customers who were never customers of US West, but were

> rather, former customers of GTE or another independent phone company. Thus, the assessment of the IUSC obtains for US West not only compensation for alleged competitive losses, but a new and potentially large revenue stream as well.

ELI and **TCG** make similar arguments, emphasizing that USWC's approach assumes that all future, as well as current, business lines would be USWC customers.

In addition, several parties argue that the criteria proposed by USWC for reducing or eliminating the I-USC are arbitrary and subject to manipulation. TCG also observes that the conditions for waiving the charge permit USWC to impede competition by burdening new entrants with costs that will remain in effect for an indefinite length of time at USWC's discretion.

Opponents of the I-USC acknowledge that there are definable customer groups that may require a subsidy to remain on the network. Rather than have USWC administer such subsidies, however, the Commission or another independent entity should assume responsibility for determining the appropriate subsidy mechanism and the customer groups eligible to receive support. Generalized surcharges such as the I-USC are an inappropriate means of funding universal service. AT&T and ELI recommend that the Commission reject USWC's arguments regarding universal service and COLR until such time as USWC quantifies the level of support associated with those obligations. Mr. Montgomery states:

> The policy question concerning whether and how much contribution is required to protect universal service is whether a particular group of customers would still be served at the option of the incumbent carrier, without any COLR obligation, even if some component of the ratepayer's service is below the piece part cost of that service. Piece part cost studies cannot answer this question. The answer requires looking at the overall cash flow derived from the customer, considering all sources of revenue.

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> The COLR concept assumes that being the provider of telephone service is a liability, when in fact the market shows that it is an asset. LECs like USWC claim that being a COLR is a liability wherever cost studies seem to indicate that access prices are below the costs of this specific "service." Telephone company cost studies treat "basic exchange access" as a separate service, when, in fact, access lines are what provide the economies of scope in telecommunications. Many services can be provided once access is available but not without it. LEC cost studies typically examine only some of the economic factors that would be needed in order to determine whether one class of users was subsidizing another class. Even if it were assumed that these piece part cost studies are completely

accurate, they are not sufficient to set contribution policies with respect to competitive entrants.

Staff agrees with the I-USC in concept, but disagrees with USWC's method of computing the charge. Staff's approach incorporates different EAS rates and a different cost methodology. If the Commission approves an I-USC, Staff recommends that USWC and GTE file proposed I-USC rates and supporting cost data as separate tariffs.

Flat Rate Compensation

TCG proposes a compensation arrangement that allows local exchange traffic to be transferred to the terminating carrier at its last point of switching at no charge to the originating carrier. This arrangement would apply equally to AECs and incumbent LECs. Local exchange traffic transferred to the terminating carrier at locations other than the terminating carrier's last point of switching, however, would be terminated at a flat monthly charge that recovers only the terminating carrier's cost of transporting the traffic from the transfer location to the last point of switching (including any intermediate switching). In other words, TCG recommends bill and keep compensation for end office termination and a flat rate port charge for termination at the tandem switch.

Dr. Teske proposes bill and keep for end office terminations because AECs are unlikely to build facilities to an end office unless there are sufficient traffic volumes to warrant construction of those facilities. Under those circumstances, there is likely to be a community of interest in the calling area. Consequently, traffic flows between AECs and LECs will tend to be closer to equilibrium. Tandem interconnections, on the other hand, entail additional switching and trunking costs that justify a flat rate port charge until traffic reaches a rough equilibrium. This approach addresses concerns relating to traffic imbalance by providing a transition mechanism to bill and keep without incurring the problems associated with traffic measurement. In addition, the end office/tandem pricing differential is designed to encourage investment in and development of AEC facilities to the end office. Dr. Teske maintains that this investment will enhance network redundancy, leading to a more reliable "network of networks" and a more robust telecommunications infrastructure.

TCG's proposed flat rate charge would require carriers to make available DS1 capacity switch ports for terminating traffic at the tandem and end office levels. The ports would be priced on a flat monthly basis and would reflect differing end office and tandem functions.[19] Carriers would measure the peak busy hour of each month to determine the relative traffic flow over the DS1 facility and allocate port charges using the deploying carrier's tariffed rate. By monitoring peak busy hour usage, carriers will be able to ascertain when traffic is balanced and can make the transition to bill and keep

[19] To allow for bill and keep, end office ports and the end office switching component of the tandem charge should be priced at zero.

for tandem interconnections at that time. Dr. Teske calculates the capacity based rate for tandem ports by multiplying the per minute cost of tandem switching and (average) transport by an assumed DS1 usage of 216,000 minutes per month. In a recent interconnection compensation case in Washington State, this formula yielded a monthly flat rate charge of $130 for a tandem DS1 port.

Dr. Teske states that TCG's proposed compensation structure better reflects how interconnection related costs are incurred than does usage sensitive pricing. The bulk LEC interconnection related costs result from "lumpy" investments in switching and interoffice trunking capacity that are designed to meet peak usage requirements, while the cost of carrying off peak traffic is essentially zero. As a consequence, usage sensitive compensation schemes substantially overstate the cost of completing calls during most times of the day. Moreover, flat rate capacity charges are a more logical means of assessing call completion charges in a competitive market since competition forces price structures to match underlying cost structures.

ELI concurs with TCG's position regarding cost causation in telecommunications networks.[20] Mr. Montgomery states:

> The new technologies are less sensitive to call distances and to call usage. Whereas usage rate structures measure only these factors, the underlying costs are becoming relatively more sensitive to the capacity demanded, rather like the "demand charge" in kilowatts in an electric service pricing structure, compared with usage sensitive kilowatt hours. Fiber optics technologies are much less distance sensitive than the predecessor metallic, analog technologies. In the long distance market, all of the major carriers now offer optional postalized rates (*i.e.*, rates that do not vary by the distance covered, as postage stamp rates), so that a call from Portland to Washington, D.C., costs the same as a call from Portland to Salt Lake City. These postalized rates recognize, among other things, the reduced sensitivity of the fiber optic transport technologies used by interexchange carriers. Local carrier networks are, of course, evolving so that most calls already transverse fiber optics technologies at some point, and the networks placed by entrants like ELI will be predominantly fiber optics. Likewise, switching and call control systems are also much less "traffic sensitive" and more "non-traffic sensitive" than outmoded costing models like jurisdictional separations rules currently recognize. Digital switches are predominantly "non-traffic sensitive" as are new call control systems like Signaling System 7.

TCG and ELI also point out that capacity based reciprocal interconnection compensation arrangements afford all carriers greater retail pricing flexibility than usage

[20] Although ELI recommends bill and keep for intercompany compensation, it states that a TSLRIC-based flat rate port charge is preferable to usage-sensitive charges if cash compensation is required.

based compensation structures. Despite the fact that the retail telephone market in Oregon is dominated by flat rate local calling, AECs will be unable to offer flat rate local calling if they must pay per minute charges to terminate traffic. If usage sensitive pricing is adopted, AECs will be forced to choose between offering minute of use pricing and garnering little or no market share, or offering flat rate calling and losing money. Effective local exchange competition is unlikely under either scenario. Capacity based charges, on the other hand, permit all carriers to develop both flat rate and measured usage options for local calling, including time of day and volume discounts. This type of pricing flexibility is not possible in an environment where the dominant carrier imposes per minute interconnection charges, because those charges effectively establish a price floor for all carriers operating in the market.

Finally, Dr. Teske observes that flat rate capacity charges are simpler to administer because they entail only the monthly measurement of traffic and billing of a fixed charge. Per minute charges, on the other hand, require complex and costly measuring, recording and billing capabilities that few carriers now possess.

Flat Rate Compensation–Opposing Arguments

GTE argues that TCG's proposed flat rate charge for the switching component of interconnection is a departure from the cost methodology adopted by the Commission in Phase I of the UM 351 docket. GTE asserts that the UM 351 methodology develops switching costs on a per minute of use basis, and is incompatible with TCG's claim that interconnection costs are not usage sensitive. Dr. Beauvais notes that flat rate charges might be reasonable as a temporary step while measured compensation is put in place. However, incorporating the proper capacity and pricing assumptions is crucial to ensure that carriers receive proper compensation for their services.

MCImetro also disagrees with TCG's proposed flat rate port charge for terminating traffic at the tandem. It contends that the proposal will encourage providers to extend facilities to the end office instead of the tandem in order to avoid interconnection charges, without regard to the efficiency of a particular architecture for a given market. MCImetro asserts that TCG's proposal implicitly assumes that incumbent LECs have efficiently designed networks. It also distorts the market by sending signals that are unrelated to minimizing cost or maximizing efficiency.

One Way Compensation

Staff recommends a compensation arrangement that requires AECs to pay switching and transport access charges to LECs for EAS and local calls terminated on LEC facilities.[21] AECs would not be compensated for any terminating traffic. **OITA** concurs with Staff's compensation proposal.

[21] AECs would not have to pay a CCLC for local and EAS-like traffic terminated on LEC switches. The CCLC would continue to apply to intraLATA toll traffic.

Staff witness Thomas Turner offers three reasons for opposing reciprocal compensation. First, the AECs, unlike the incumbent utilities, are not subject to extensive rate, service and cost regulations and do not have universal service or COLR obligations. Second, reciprocal compensation is not available to other entities that lease or own telecommunications facilities, including radio common carriers (RCCs), Shared Telecommunications Service (STS) providers, coin telephone providers, and private line networks. Last, Mr. Turner states that reciprocal compensation may create an incentive to "game the system" at LEC expense, by obtaining authority, leasing a few lines, and receiving compensation from the LEC for all incoming traffic. While such a scenario may seem unlikely, Staff believes it is prudent to anticipate that carriers might take advantage of such an opportunity.

Staff does not believe that AECs will be adversely impacted by the lack of compensation for traffic terminated on their networks. Mr. Turner observes that RCCs have experienced phenomenal growth despite the fact that they receive no compensation from LECs. In addition, AECs have a strong growth potential because they face few regulatory restraints and can become "one stop" telecommunications providers by integrating terminal equipment, radio communications, and long distance communications together with targeted local exchange services. Staff states that reciprocal compensation may be appropriate when the "regulatory landscape is equal," but recommends that the Commission proceed cautiously to avoid jeopardizing affordable service.

As a policy matter, Staff recommends that the interconnection compensation mechanism adopted in this proceeding should be interim in nature. It recommends that the Commission open an investigation to consider a permanent solution within a year after the first AEC is authorized to provide local exchange service. Staff proposes that AECs pay from 1.3 to 1.6 cpm to terminate traffic on USWC's network, depending upon local transport distance. Staff recommends that the Commission adopt the rate proposed by GTE for traffic terminated on that carrier's network.

One Way Compensation–Opposing Arguments

ELI, MCImetro, MFS, TCG, Sprint, McCaw, OCTA and **AT&T** oppose the one way compensation scheme recommended by Staff. They make the following arguments:

(a) Because Staff's proposal allows only LECs to charge for calls terminated on their network facilities, it will foreclose effective competition and perpetuate LEC domination of local exchange markets. Staff's proposed compensation structure attempts to achieve "regulatory symmetry" by denying AECs compensation for interconnection, but ignores the fact that the incumbent LECs possess 100 percent of the

market for switched local exchange service. Dr. Cornell argues that regulation should acknowledge differences in market power. Moreover, to the extent that LEC rates incorporate cross subsidies to support universal service and ubiquity, the proper regulatory response is not to impose uneconomic costs on entrants in a manner that impedes competition. Rather, the appropriate response is to identify valid policy goals, quantify the level of support necessary to achieve them, and devise a competitively neutral means of funding. The pending universal service and unbundling/repricing dockets are the appropriate forums in which to consider these issues.

(b) According to **MFS**, Staff's one-way compensation approach is undermined by the cost evidence presented by Staff witness Turner. Mr. Turner's calculations disclose that residential customer rates paid by incumbent LEC customers are above cost. If LECs are in fact experiencing a positive margin on residential service, then universal service does not impose a burden on the incumbent, but rather conveys a benefit. MFS observes that Mr. Turner did not address, and could not quantify, how holding the incumbent LECs harmless from paying compensation relates in any direct, quantifiable manner to specific universal service costs. Nor did Staff discuss whether universal service support–to the extent such a subsidy exists–is being provided by the LECs in the most economically efficient manner. Consequently, there is no justification for denying AECs compensation for terminating local exchange traffic as a surrogate for universal service obligations.

(c) **ELI, MCImetro** and **McCaw** argue that Staff's attempt to compare AEC interconnection arrangements with the compensation structure paid by RCCs is misplaced. McCaw points out that FCC rules require mutual compensation for interconnection services established between wireless and wireline competitors. While current interconnection tariffs do not provide for mutual compensation for cellular carriers, this situation must change to advance the goal of competitive neutrality. Toward this end, several parties, including Staff and the LECs, advocate eliminating use and user restrictions and moving toward an environment where all interconnecting entities purchase network functionalities from the same unbundled tariffs. Staff's one way compensation scheme is incompatible with this objective and should be rejected.

MCImetro further argues that nonreciprocal compensation is a major reason why cellular carriers have traditionally been perceived as providing discretionary, high priced service rather than as a substitute for traditional local phone service. According to Dr. Cornell:

> Cellular carriers were forced to be niche providers, serving a supplementary purpose only, because they were denied true cocarrier treatment, subjected to interconnection charges that priced them out of being able to effectively compete for local exchange service.